

Journal of Oceanography

Volume 53 (1997)

Contents

Number 1

N. Harada, N. Handa, T. Oba, H. Matsuoka, K. Kimoto and M. Kusakabe: Age Determination of Marine Sediments in the Western North Pacific by Aspartic Acid Chronology	1
S. Tsunogai, S. Watanabe, J. Nakamura, T. Ono and T. Sato: A Preliminary Study of Carbon System in the East China Sea	9
M. Kawabe and M. Kawabe: Temporal and Spatial Characteristics of Chemical Oxygen Demand in Tokyo Bay	19
M. Onishi and K. Ohtani: Volume Transport of the Tsushima Warm Current, West of Tsugaru Strait Bifurcation Area	27
T. Suzuki and A. Taniguchi: Temporal Change of Clustered Distribution of Planktonic Ciliates in Toyama Bay in Summers of 1989 and 1990	35
T. Hama, K. H. Shin and N. Handa: Spatial Variability in the Primary Productivity in the East China Sea and Its Adjacent Waters	41
H. Matsuura and G. A. Cannon: Wind Effects on the Sub-Tidal Currents in Puget Sound	53
G. T. Csanady: The "Slip Law" of the Free Surface	67
R. E. Thomson, P. H. LeBlond and A. B. Rabinovich: Oceanic Odyssey of a Satellite-Tracked Drifter: North Pacific Variability Delineated by a Single Drifter Trajectory	81
Short Contribution	
K. E. Kenyon: Gravity Torques for Surface Waves	89

Number 2

K. Uehara, H. Miyake and M. Okazaki: Characteristics of the Flows in the Oyashio Area off Cape Erimo, Hokkaido, Japan	93
T. Nakatsuka and N. Handa: Reconstruction of Seasonal Variation in Nutrient Budget of a Surface Mixed Layer Using $\delta^{15}\text{N}$ of Sinking Particle Collected by a Time-Series Sediment Trap System	105
H. Zheng, N. Gohda, H. Noguchi, T. Ito, H. Yamaoka, T. Tamura, Y. Takasugi and A. Kaneko: Reciprocal Sound Transmission Experiment for Current Measurement in the Seto Inland Sea, Japan	117
K. Akitomo, S. Masuda and T. Awaji: Kuroshio Path Variation South of Japan: Stability of the Paths in a Multiple Equilibrium Regime	129
Y. Kitade and M. Matsuyama: Characteristics of Internal Tides in the Upper Layer of Sagami Bay	143

Y. Kawai and H. Kawamura: Characteristics of the Satellite-Derived Sea Surface Temperature in the Oceans around Japan	161
K. Ohta: Diurnal Variations of Carbon Monoxide Concentration in the Equatorial Pacific Upwelling Region	173
H.-B. Cheong and Y.-H. Han: Numerical Study of Two-Dimensional Gravity Currents on a Slope	179
T. Naganuma, C. Kato, H. Hirayama, N. Moriyama, J. Hashimoto and K. Horikoshi: Intracellular Occurrence of ϵ -Proteobacterial 16S rDNA Sequences in the Vestimentiferan Trophosome	193
M. Matsuyama, S. Iwata and H. Nagamatsu: Kyucho in Sagami Bay Induced by Typhoon 8818	199

Number 3

Review

G. T. Csanady: On the Theories that Underlie Our Understanding of Continental Shelf Circulation	207
---	-----

Original

A. Kubokawa: A Two-Level Model of Subtropical Gyre and Subtropical Countercurrent	231
J. Ishizaka, I. Asanuma, N. Ebuchi, H. Fukushima, H. Kawamura, K. Kawasaki, M. Kishino, M. Kubota, H. Masuko, S. Matsumura, S. Saitoh, Y. Senga, M. Shimanuki, N. Tomii and M. Utashima: Time Series of Physical and Optical Parameters off Shimane, Japan, during Fall of 1993: First Observation by Moored Optical Buoy System for ADEOS Data Verification	245
T. Matsuno, T. Hibiya, S. Kanari and C. Kobayashi: Small Scale Internal Waves and Turbulent Fluctuations near the Continental Shelf Break in the East China Sea	259
D. A. Nechaev, M. I. Yaremchuk and M. Ikeda: Vertical Projection of Surface Velocity Data Using the Variational Assimilation Method with Quasigeostrophic Dynamical Constraints	271
S. Fujio and N. Imasato: Prognostic Simulation of the World Ocean Circulation and Its Comparison with Diagnostic Simulation	283

Short Contribution

T. Kamiyama: Effects of Phytoplankton Abundance on Excystment of Tintinnid Ciliates from Marine Sediments	299
T. Yanagi, A. Morimoto and K. Ichikawa: Co-tidal and Co-range Charts for the East China Sea and the Yellow Sea Derived from Satellite Altimetric Data	303
K. E. Kenyon: Cyclostrophic Balance in Surface Gravity Waves: Essay on Coriolis Effects	311

Number 4

D.-H. Kim, O. Matsuda and T. Yamamoto: Nitrification, Denitrification and Nitrate Reduction Rates in the Sediment of Hiroshima Bay, Japan	317
A. Nadai, H. Kuroiwa, M. Mizutori and S. Sakai: Measurement of Ocean Surface Currents by CRL HF Ocean Surface Radar of the FMCW Type. Part 1. Radial Current Velocity	325
Y. Kawai and H. Kawamura: Seasonal and Diurnal Variability of Differences between Satellite-Derived and in situ Sea Surface Temperatures in the South of the Sea of Okhotsk	343
H. Kawahata and N. Eguchi: Palaeoproductivity in the North Fiji Basin during the Late Pleistocene	355
T. Tanimoto and A. Hoshika: Transport of Total Suspended Matter, Particulate Organic Carbon, Organic Nitrogen and Phosphorus in the Inner Part of Osaka Bay	365
A. Isobe and Y. Isoda: Circulation in the Japan Basin, the Northern Part of the Japan Sea	373
K. Suzuki, N. Handa, H. Kiyosawa and J. Ishizaka: Temporal and Spatial Distribution of Phytoplankton Pigments in the central Pacific Ocean along 175°E during the Boreal Summers of 1992 and 1993	383

Short Contribution

M. Kawamiya, M. J. Kishi, Y. Yamanaka and N. Suginohara: Obtaining Reasonable Results in Different Oceanic Regimes with the Same Ecological Physical Coupled Model	397
T. Yanagi, X. Guo, T. Saino, T. Ishimaru and S. Noriki: Thermohaline Front at the Mouth of Ise Bay	403

Number 5

Wahyudi and M. Minagawa: Response of benthic foraminifera to Organic Carbon Accumulation Rates in the Okinawa Trough	411
H. Matsuura, T. Sugimoto, M. Nakai and S. Tsuji: Oceanographic Conditions near the Spawning Ground of Southern Bluefin Tuna; Northeastern Indian Ocean	421
T. Naganuma and S. Miura: Abundance, Production and Viability of Bacterioplankton in the Seto Inland Sea, Japan	435
Mi. Kawabe and M. Kawabe: Factors Determining Chemical Oxygen Demand in Tokyo Bay	443
K. Takahashi: Siliceous Microplankton Fluxes in the Eastern Subarctic Pacific, 1982–1986	455
H.-J. Lee, S.-Y. Chao, K.-L. Fan, Y.-H. Wang and N.-K. Liang: Tidally Induced Upwelling in a Semi-Enclosed Basin: Nan Wan Bay	467
C.-A. Huh: Upper Ocean Distribution of ²³⁴ Th in the Northeast Pacific: Temporal Variation and the Role of Colloids	481
Y. Ishikawa, T. Awaji and K. Akitomo: Global Surface Circulation and Its Kinetic Energy Distribution Derived from Drifting Buoys	489

Number 6

Y. I. Kim, H. Narita, S. Noriki and S. Tsunogai: Export of Particulate Matter from Tokyo Bay Studied with Radiochemical Tracers, ^{210}Po and ^{210}Pb	517
S. Uye and T. Shimazu: Geographical and Seasonal Variations in Abundance, Biomass and Estimated Production Rates of Meso- and Macrozooplankton in the Inland Sea of Japan	529
K. Takeuchi and T. Hibiya: Numerical Simulation of Baroclinic Tidal Currents in Suruga Bay and Uchiura Bay Using a High Resolution Level Model	539
H. Minami and Y. Kato: Remobilization of Arsenic in Sub-Oxic Sediments from the Seafloor of the Continental Margin	553
H. Takeoka, A. Kaneda and H. Anami: Tidal Fronts Induced by Horizontal Contrast of Vertical Mixing Efficiency	563
S. Noriki, M. Shimizu, K. Hamahara, H. Narita, T. Saino and T. Yanagi: Transportation of Particulate Material through the Mouth of Tokyo Bay to the Open Ocean	571
T. Naganuma: Abundance and Production of Bacterioplankton along a Transect of Ise Bay, Japan	579
T. Kuragano and A. Shibata: Sea Surface Dynamic Height of the Pacific Ocean Derived from TOPEX/POSEIDON Altimeter Data: Calculation Method and Accuracy	585
A. Shiimoto: Size-Fractionated Chlorophyll <i>a</i> Concentration and Primary Production in the Okhotsk Sea in October and November 1993, with Special Reference to the Influence of Dichothermal Water	601
K. Oishi and M. Saigusa: Nighttime Emergence Patterns of Planktonic and Benthic Crustaceans in a Shallow Subtidal Environment	611
S. Aoki: Trends and Interannual Variability of Surface Layer Temperature in the Indian Sector of the Southern Ocean Observed by Japanese Antarctic Research Expeditions	623
Y. Morikawa, J. Takeuchi, T. Uema, T. Imoto and Y. Nagata: High Salinity Waters Found off the Kii Peninsula	633
M. C. Honda, M. Kusakabe, S. Nakabayashi, S. J. Manganini and S. Honjo: Change in pCO_2 through Biological Activity in the Marginal Seas of the Western North Pacific: The Efficiency of the Biological Pump Estimated by a Sediment Trap Experiment	645